## **ABSTRACT**

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In the current economic world, knowledge is among the key resources of an organization and is treated as a major factor in the development of any enterprise. It therefore becomes a fundamental tool for competitiveness. The main objective of the dissertation was to study the role and determinants of technological knowledge management in the activities of startups, taking into account the stages of creation, acquisition, transfer and application of this knowledge. This goal was achieved through a detailed analysis and review of the literature on the issues of knowledge management, technology, startup companies and conducted empirical research The first specific goal was to try to identify differences in the definition of technological knowledge by experts in the startup environment. The next objective of the study was to examine the impact of the use of technological knowledge management processes (creation, acquisition, transfer and application of knowledge) on the activities of startups. The next objective was to determine the differentiation of the role of technological knowledge in the activities of startups. Another objective of the study was to determine the relationship between the development phase of startups and the level of technological knowledge management. The goal of the study was also to determine the importance of technological knowledge in the activities of startups The next goal of the study was to compare the importance of technological knowledge of startups according to the work experience of startup employees. Meanwhile, the last objective of the study was to evaluate the impact of a company's territorial coverage on the propensity to acquire technological knowledge. The research hypotheses were centered around the main objective of the research problem. All the objectives of the work were achieved and the hypothesis goals were verified.

The study of factors stimulating and hindering the management of technological knowledge of startups was carried out through interviews with experts from the startup environment. The information obtained in the interviews was used in the process of preparing surveys. Surveys aimed at representatives of startups were conducted. The Atlas.ti program was used for the analysis of qualitative research, while the SPSS program was used for quantitative research. The results of the research showed differences in the definition of the concept of technological knowledge by experts from the startup environment. It was confirmed that the high use of technological knowledge management processes positively influences the activities of startups. It was also noted that there is variation among startups regarding the role of technological knowledge in their activities. The results of the study also confirmed that the development stage of startups determines the different level of technological knowledge management. The research indicated that technological knowledge is a key determinant of startups' development. No significant differences were noted in the evaluation of the importance of technological knowledge in gaining a competitive advantage for startups by experienced employees. The concept of technological knowledge was also defined and its characteristics identified. The work fills the theoretical gap in the

issue of technological knowledge and its relationship to the development activities of startups. The results obtained can be practical for startups. On the basis of the study, actions can be recommended to improve their technological knowledge management processes.